to 800 pounds each. The boats that went out to their nets this morning caught from 6,000 to 8,000 pounds each, while the night before the same nets in the same place only caught from 300 to 500 pounds.

GLOUCESTER, MASS., December 14, 1884.

## 15.-THE PENOBSCOT AND SCHOODIC SALMON WORK OF 1884-'85.

## By CHAS. G. ATKINS.

[From a letter to Prof. S. F. Baird.]

The eggs taken this year at the Penobscot station will count nearly 1,900,000. This is about 600,000 less than last year, though we had a larger number of fish. The explanation is found in two circumstances: First, that the fish were much smaller than last year; second, that there was a larger proportion of males. I think we can count on having 1,750,000 eggs to ship. Your pro rata share will be about 1,050,000. Maine will have 500,000; Massachusetts 200,000. It would be well to have, at any rate, a partial assignment made very soon. We had warmer weather than usual in November, and the eggs are more forward in development. I think Mr. Mather would be glad to receive some early.

At Grand Lake stream we secured about 1,727,000 eggs. A loss of 10 per cent. will leave 1,554,000, and the 25 per cent. reserve (388,500) will reduce the number available for shipment to 1,165,500. A pro rata division, on the basis of 1,150,000, will give to—

United States (\frac{13}{25})	598, 000
Maine $(\frac{5}{25})$ Massachusetts $(\frac{4}{25})$ New Humpshire $(\frac{3}{2})$	230, 000
Massachusetts (25)	184,000
New Hampshire $(\frac{3}{25})$	138, 000

1, 150, 000

These eggs are now in our coldest water, and will not be ready for shipment before late in February. I would like to find whether the serious losses that have attended shipments to the South and West cannot be avoided by keeping the eggs in lake water during the entire time of their development at Grand Lake stream, instead of exposing them for a few weeks to spring water as we have heretofore practiced, with a view to hastening their development.

The fish at Grand Lake stream have been plentier than last year, and the augmentation in size continues. The females taken this year averaged 3 pounds and 15.7 ounces in weight, the males 4 pounds and .1 ounce. In 1875, the males averaged 1.6 pounds, and the females 1.9 pounds. There has been a corresponding appreciation in fecundity, the yield being 753 eggs per female in 1875, and 2,228 eggs per female in 1884, a gain of nearly 200 per cent.

BUCKSPORT, ME., December 12, 1884.